

Table S2
Age and dose dependence for expression of select mRNAs

Category	Gene	Predictor	HZE			γ-ray		
			Parameter estimate	Parameter uncertainty	P value	Parameter estimate	Parameter uncertainty	P value
Mitochondria/antioxidant response	PPARGC1A	Intercept	-0.86	0.35	0.014	1.55	0.30	0.0001
		Age	-0.003	0.0007	<0.0001	-0.004	0.0006	<0.0001
		Dose	-0.19	0.09	0.03	-0.09	0.03	0.0005
	SOD2	Intercept	-0.26	0.17	0.1255	NS ^a	NS ^a	NS ^a
		Age	0.002	0.0004	0.0001	NS ^a	NS ^a	NS ^a
		Dose	-0.08	0.04	0.0445	NS ^a	NS ^a	NS ^a
	CAT	Intercept	NS ^a	NS ^a	NS ^a	0.83	0.23	0.0004
		Age	NS ^a	NS ^a	NS ^a	-0.003	0.0005	<0.0001
		Dose	NS ^a	NS ^a	NS ^a	0.006	0.020	0.7817
Proliferation/antiproliferation	CDKN1A	Intercept	-0.53	0.46	0.2534	-0.60	0.40	0.1374
		Age	-0.002	0.0001	0.0212	0.002	0.0009	0.0145
		Dose	-0.37	0.11	0.0017	-0.10	0.0040	0.0040
	SIRT3	Intercept	-0.03	0.26	0.9180	NS ^a	NS ^a	NS ^a
		Age	-0.001	0.0006	0.0317	NS ^a	NS ^a	NS ^a
		Dose	0.19	0.06	0.0028	NS ^a	NS ^a	NS ^a
Paracrine signaling	PTGES	Intercept	-0.20	0.19	0.2971	1.19		<0.0001
		Age	-0.08	0.05	0.0059	-0.002	0.0009	<0.0001
		Dose	-0.001	0.0004	0.0774	-0.10	0.04	0.0040

^aNS Non-significant. Assumptions violated for univariate model.
Units for age are days; units for dose are Gy. Parameters are for $\Delta\Delta C_t$